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Bernhard Gleich

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

GUPTA, VANI

ART UNIT

PAPER NUMBER

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Please find below and/or attached an Office communication concerning this application or proceeding.

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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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EXAMINER

VANI GUPTA

ART UNIT	PAPER
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Commissioner for Patents

Correction to Examiner's Answer:

Section - "Grounds of Rejection:" header paragraph incorrectly listed claim 15 as being rejected, even though it is a cancelled claim. This section, in its entirety is included below with corrections to the header. No changes have been made to the actual rejections.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1 – 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kraus, JR. et al. (US 6,470, 220 B1) in view of Wang et al. (US 6,940,286 B2).

Regarding Claim 1, Kraus, JR. et al. (hereinafter Kraus) discloses a device for examination and use of an electrical field in a magnetic gradient field, containing magnetic particles in an examination area of an object under examination, comprising

a) at least one first arrangement for determining the spatial distribution of magnetic particles in at least one examination area of the examination object, comprising a means for generating a magnetic field with such a spatial profile of the magnetic field strength that a first sub-zone with low magnetic field strength and a second sub-zone with a higher magnetic field strength are produced in at least one examination area, a means for detecting signals ("SQUID," col. 7, ll. 60 – 67) which depend on the magnetization in the examination object, especially in the examination area, influenced by a local change in the particles, together with a means for evaluating the signals to obtain information about the, especially time-variable, spatial distribution of the magnetic particles in the examination area (col. 13, ll. 9 – col. 14, line 36).

However, Kraus does not suggest the second arrangement of Claim 1.

Nonetheless, Wang et al. teaches at least one second arrangement, comprising at

least one electrical transmits and/or receive unit, comprising:
at least one voltage generator (“electrically conductive ring” surrounding object of interest); and
at least one terminal contact (“electrical contacts,” (2); col. 5, line 7) connected to the voltage generator (col. 5, ll. 3 – 7 and 17 – 19)
and applicable and/or fastenable to an object (3) under examination (fig. 1; Abstract; col. 4, ll. 60 – 65).

With respect to a ground terminal: it would be have been obvious matter of design choice, as it would have been well known to one of ordinary skill in the art, to include a ground terminal for safety reasons so as to not electrocute a patient during examination.

It would have been prima facie obvious to modify Kraus to with Wang et al. to obtain additional information such electrical impedance distribution (col. 2, ll. 38 - 50) to complement the spatial distribution of magnetic particles studies performed by Kraus.

Regarding Claim 2, Wang et al. discloses that the device comprises at least one pair of contact electrodes, especially a plurality of pairs of contact electrodes, for recording potential differences (Abstract; and col. 5, ll. 1 – 55).

Regarding Claim 3, Wang et al. teaches that the device is characterized by at least one voltage measuring unit and/or current measuring unit (see rejection of claims 1 and 2).

Regarding Claim 4, Wang et al. teaches that the device is characterized in that the voltage generator, the voltage measuring unit and/or the current measuring unit may be brought into or are in active connection with a microprocessor or computer (fig. 20).

Regarding Claim 5, Wang et al. teaches that the second arrangement is characterized in that the voltage measuring unit and/or the current measuring unit is/are equipped with at least one analog filter, measuring amplifier, A/D converter and/or digital filter (col. 4, ll. 24 – 27).

Regarding Claim 6, Wang et al. teaches applying voltage to a region of interest (col. 5, ll. 17 – 19). Nonetheless, as it would have been obvious to one of ordinary skill in the art at the time the invention was made to generate a voltage with the range of 10 V and 200 V, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only skill in the art. See *In re Aller*, 105 USPQ 233.

Regarding Claim 7, Kraus discloses that device is characterized by at least one frequency converter (col. 9, line 41 – Equation 1).

Regarding Claims 8, 9, and 12 – 14, Kraus discloses relevant characterizations (see rejection of Claim 1; col. 9, line 23 - col. 10, line 64; col. 13, ll. 16 - 18; and col. 14, ll. 9 – 15).

Regarding Claim 10, Kraus discloses that at least one coil arrangement, for changing the spatial position of the two sub-zones in the examination area, such that the magnetization of the particles varies locally (col. 13, ll. 9 – 14).

Regarding Claim 11, Kraus discloses that a coil arrangement, for changing the spatial position of the two sub-zones in the examination area by means of superimposition of an oscillating or rotating magnetic field, especially in the first sub-zone with low field strength (rejection of claim 1; col. 3, ll. 9 – 14 and 52 - 60; col. 9, ll. 65 - 67; and col. 11, line 58 - col. 12, line 5).

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